UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,785	03/08/2004	Leslie R. Fine	200401144-1	4138

7590 11/29/2007

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER	
EBERSMAN, BRUCE I	
ART UNIT	PAPER NUMBER
4172	

MAIL DATE	DELIVERY MODE
11/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/797,785	FINE ET AL.	
	Examiner	Art Unit	
	Bruce I. Ebersman	4172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3/8/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The following is a non-final, first office action on the merits. Review of the claims necessitated the rejections and objections below.

OBJECTIONS

1. The disclosure is objected to because of the following informalities:

Claim 7 claims the method of claim 7. Appropriate correction is required.

CLAIM REJECTIONS 35 USC 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter. Claim 22 is to a computer program. While computer programs are not patentable, a computer readable medium can be claimed, appropriate correction is required.

CLAIM REJECTIONS 35 USC 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3,12,21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant uses the terms center probability bin and increasing variances from the center probability bin. However, in paragraph 0059 of the specification, variance appears to be described as the difference between upper and lower points in a bin. In the claims (ex 3,12,21, applicant uses variance to define increasing variances from a center probability. It is not clear to the examiner which variance is being called for as, variance within the bin, or variance of the data or range (as per examples) and if so, how would this changing variance would be determined by one of ordinary skill in the art. (process is described). Likewise, applicant uses a difference in the bin as a variance where as, this would be commonly called a range. Further, the applicant seems to imply that this width of the bins widens as we go further from the center but, the claim can easily be interpreted to be defining the bins to be of increasing variance (standard term), implying a formula (variance formula) which would indicate where or the size of the claimed bin or distance from the center. However, applicant does not clearly indicate how this “range” (variance) is devised nor do they clearly explain how to create this and would it be linear or exponential or random widening?

Claims 4, 13, further claim a mean estimate as the center probability bin. However, the application Is somewhat unclear as to the meaning when paragraph 0056

defines it to be recent revenue information or a “simple guess”. Revenue information does not enable the concept nor does simple guess. Appropriate definition or claim amendment is required.

CLAIM REJECTIONS- 35 USC 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-16, 18-23 rejected under 35 USC 103(a) as being unpatentable over US Patent 6236900 to Geiger in view of US Patent 6493682 to Horrigan.

As per claims 1,10,22

Geiger discloses determining at least one participant characteristic of a participant; (Col. 2, line 5-10), Geiger discloses a query process and probabilities. (Col. 3, line 19-23)

aggregating a result of the query process with weighting for the participant characteristic. (Col 4., line 11-17 and 45-63)

Geiger does not specifically disclose defining probability bins and that each probability bin corresponding to a probability is associated with an expected outcome (probabilities are disclosed). Geiger does also not specifically associate performing a query process with probability bins.

Horigan teaches defining probability bins, (col. 22 line 60-5), Further, Horigan teaches that each of the probability bins corresponding to a probability associated with an expected outcome; (Col 60-5, Col. 22)
and probability bins in conjunction with assets (Col 5, line 50).

It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the forecasting methods and disclosures which can work for assets or gaming with the probability bin and predictive teachings of Horrigan for the purpose of predicting asset values using probability bins to differentiate values which are continuous.

As per claims 2,11,23 Geiger (Col. 1, line 57-67 and Col 2, line 31-36) discloses an information market, ie a competitive forum where participants submit predictions relating to future events.

As per claims 3, 12, 21

Geiger does not specifically disclose methods to define center probability bins with increasing variances from the center (examiner noted in section #3 that center probability bins are loosely defined to include even a “simple guess”. Horrigan (Col 22, line 55- Col 23, line 60) teaches probability bins for the analysis of simulated trading data and further teaches how to apply probability bins for the purpose of conducting trading optimizations on continuous data. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the predictive event forecasting disclosure of Geiger with the probability bin teachings of Horrigan to perform forecasting on continuous data sets.

As per claims 4,13, examiner noted in section #3 that claims 4,13 are vague in their reference to mean estimates. Geiger does not specifically disclose the use of such mean estimates as the center probability bin. Horrigan teaches probability bins (Col 20, line 5-40 and table 5 for the purpose of estimating continuous data sets. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the predictive event disclosures of Geiger with the probability bin teachings of Horrigan to produce a more accurate prediction.

As per claims 5,14, Geiger does not specifically disclose defining probability bins comprising sub-dividing historical data into probability bins. Horrigan, Col. 25, table 5 and 32e3a teaches probability bins which sub divide historical data for the purpose of

analyzing historical data using discrete categories. It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the forecasting system disclosed in Geiger with the probability bins teachings of Horrigan for the purpose of analyzing historical data using discrete probability categorization.

As per claims 6,15, Geiger discloses performing a query process comprising wagering by the participant on expected outcomes. (Col. 2, line 20)

As per claims 7, 16, Geiger discloses wagering via a web based software application. (Col 2, line 30)

As per claims 9, 18, Geiger discloses a query process comprising a matching market, including stock trading and options trading type of forums (Col 3, line 10)

As per claims 8, 17, Geiger discloses weighting but does not specifically disclose exponential factoring.

5. Claims 8,17 rejected under 35 USC 103(a) as being unpatentable over US Patent 6236900 to Geiger in view of US Patent 6493682 to Horrigan and in further view of US Patent 6606615 to Jennings.

As per claims 8,17, Geiger discloses participant prediction (Col, 2, line 20) but, Geiger and Horrigan do not specifically discloses exponential factoring for the participant characteristic and query process. Jennings teaches forecasting process where the results of the query process are aggregated by utilizing Bayes Formula for each probability of the potential outcome assigned by a participant modified by an exponential factor for the purpose of factoring the probability adjustments associated with each participants characteristics. (Col. 53, Lines 30-40). It would therefore have been obvious to one of ordinary skill in the art at the time of the invention to combine the participant characteristic and query process disclosure of Geiger with the participant prediction and exponential factoring teachings of Jennings for the purpose of accounting for participant characteristics in a query process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruce I. Ebersman whose telephone number is (571) 270 3442. The examiner can normally be reached on 630am-5pm, with every Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dixon can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bruce I Ebersman
Examiner
Art Unit 4172

/Thomas Dixon/
Supervisory Patent Examiner, Art Unit 4172